JTEKT CSR Report 2013

Environmental Data by Operations Base ①

This page includes the environmental data for the Kokubu Plant and Kariya Plant, out of our 13 locations,including 12 domestic plants and 1 operations center.

[Chemicals] Substances subject to PRTR **[Atmosphere]** Measured values are the maximum values **[Water quality]** pH: Hydrogen-ion concentration/ COD:Chemical oxygen demand/ BOD: Biochemical oxygen demand/ SS: Suspended solids in water/ Oil content: N-hexane extract content/ ND: Lower than determination limit/ Values in parenthesis show the daily average values **[Regulated value]** JTEKT internal standards (some more stricter than regulatory amounts) **[Substances subject to PRTR]** Shows substances which are handled in amounts of 1,000 kg/year or more. Substance number shows the legislative number for each of the No. 1 type chemical substances of the PRTR regulations. Removal processing amount is the amount of substances subject to PRTR which are incinerated, neutralized, broken down, put through reaction treatment, etc. within JTEKT premises. Consumed amount is the amount of substances subject to PRTR which are changed to another substance through reaction treatment, or removed from JTEKT premises in, or attached to, products. **[Target period] April 2012 to March 2013**

Kokubu Plant

No. of Employees 2,150

Production items

- All types of ball bearings
- Roller bearings
- Ultra-large bearings
- Hub units
- High-accuracy bearings

Overall environmental data

		Classification		Volume
INPUT		Energy consumption	(GJ)	1,152,944
		Water consumed	(m^3)	501,148
		Chemical substances handled	(kg)	5,357
OUTPUT	Atmosphere	Greenhouse gases	($t\text{-}CO_2$)	45,443
		NOx	(kg)	1,165
		SOx	(kg)	0
		Chemical substances released	(kg)	1,285
	Sewage	Wastewater	(m^3)	222,703
		COD	(kg)	4,546
		Nitrogen	(kg)	—
		Phosphorus	(kg)	—
		Chemical substances transferred	(kg)	52
	Materials discarded	Recycled for profit	(t)	5,068
		Recycled at a charge	(t)	2,125
		Waste (incineration+landfill)	(t)	0
		Chemical substances transferred	(kg)	1,314

* Due to sewage disposal, there are no regulation values for COD, nitrogen, or phosphorus

Water quality measurement data

Index	Regulation value	Results	
		Maximum	Average
pH	5.4～8.6	7.4	7.0
BOD	480	50	21
SS	480	13	4.8
Oil content	4	3.6	2.0

Unit : mg/ℓ (Excluding Ph)

Atmosphere measurement data

Facility	Index	Regulation value	Maximum value
Boiler (Annealing furnace)	Dust	0.08	0.003
	NOx	144	29
	SOx	—	—
Boiler (Hot and cold water generator)	Dust	0.08	0.003
	NOx	120	39
	SOx	—	—

Unit : Dust= g/Nm^3 NOx= ppm SOx= Value K

Noise / Vibration data

Unit : dB

Index		Regulation value	Maximum	Average
Noise	Morning	59	56	49
	Afternoon	64	62	56
	Evening	59	56	51
	Night	54	53	48
Vibration	Daytime	68	44	34
	Nighttime	63	40	27

Foul odor

Unit : ppm

Measurement item	Regulation value	Measurement
Ammonia	0.8	0.27

* Malodorous substances (22 substances) were measured.
* All items not listed were below minimum determination limit.

Substances subject to PRTR

Unit : kg/year

Substance number	Chemical name	Amount handled	Amount released			Amount transferred		Amount recycled	Amount Removed and treated	Amount consumed
			Atmosphere	Waterways	Soil	Sewage	Waste			
1	Water-soluble zinc compounds	1,676	—	—	—	—	168	—	—	1,508
80	Xylene	3,202	3,202	—	—		—	—	—	—
412	Manganese and its compounds	1,133	—	—	—	23	408	—	—	702

Kariya Plant

No. of Employees 1,192

Production items

- Machine tools
- Mechatronics products

Overall environmental data

		Classification		Volume
INPUT		Energy consumption	(GJ)	216,356
		Water consumed	(m^3)	143,907
		Chemical substances handled	(kg)	3,669
OUTPUT	Atmosphere	Greenhouse gases	($t\text{-}CO_2$)	8,434
		NOx	(kg)	967
		SOx	(kg)	0
		Chemical substances released	(kg)	3,083
	Waterways	Wastewater	(m^3)	194,520
		COD	(kg)	694
		Nitrogen	(kg)	1,032
		Phosphorus	(kg)	6.0
		Chemical substances transferred	(kg)	0
	Materials discarded	Recycled for profit	(t)	847
		Recycled at a charge	(t)	283
		Waste (incineration+landfill)	(t)	0
		Chemical substances transferred	(kg)	0

Water quality measurement data

Unit : mg/ℓ (Excluding Ph)

Index	Regulation value	Results	
		Maximum	Average
pH	5.9～8.4	7.1	6.7
COD	19	4.1	3.4
BOD	(20)	11	7.8
SS	(20)	2.8	2.1
Oil content	4	1.3	0.39
Zinc	1.6	0.03	0.03

Index	Regulation value	Results	
		Maximum	Average
Soluble iron	4	ND	ND
Soluble manganese	1.6	ND	ND
Fluorine	4	0.15	0.13
Nitrogen	(16.1)	10	8.1
Phosphorus	(1.5)	0.05	0.04
Boron	8	0.04	0.02

Atmosphere measurement data

Facility	Index	Regulation value	Maximum value
Boiler (for cafeteria use)	Dust	0.1	—
	NOx	104	66
	SOx	1.2	—
Boiler (Hot and cold water generator)	Dust	0.1	0.003
	NOx	104	47
	SOx	1.2	—

Unit : Dust= g/Nm^3 NOx= ppm SOx=Nm^3/hr

Noise / Vibration data

Unit : dB

Index		Regulation value	Maximum	Average
Noise	Morning	64	54	49
	Afternoon	69	62	53
	Evening	64	59	51
	Night	59	57	50
Vibration	Daytime	68	49	33
	Nighttime	63	33	27

Foul odor

Measurement item	Regulation value	Measurement
Odor index	12	Less than 10

Substances subject to PRTR

Unit : kg/year

Substance number	Chemical name	Amount handled	Amount released			Amount transferred		Amount recycled	Amount Removed and treated	Amount consumed
			Atmosphere	Waterways	Soil	Sewage	Waste			
300	Toluene	2,619	2,103	—	—	—	—	—	—	516

JTEKT CSR Report 2013

Environmental Data by Operations Base ②

This page includes the environmental data for the Tokushima Plant and Okazaki Plant, out of our 13 locations,including 12 domestic plants and 1 operations center.

[Chemicals] Substances subject to PRTR **[Atmosphere]** Measured values are the maximum values **[Water quality]** pH: Hydrogen-ion concentration/ COD:Chemical oxygen demand/ BOD: Biochemical oxygen demand/ SS: Suspended solids in water/ Oil content: N-hexane extract content/ ND: Lower than determination limit/ Values in parenthesis show the daily average values **[Regulated value]** JTEKT internal standards (some more stricter than regulatory amounts) **[Substances subject to PRTR]** Shows substances which are handled in amounts of 1,000 kg/year or more. Substance number shows the legislative number for each of the No. 1 type chemical substances of the PRTR regulations. Removal processing amount is the amount of substances subject to PRTR which are incinerated, neutralized, broken down, put through reaction treatment, etc. within JTEKT premises. Consumed amount is the amount of substances subject to PRTR which are changed to another substance through reaction treatment, or removed from JTEKT premises in, or attached to, products. **[Target period] April 2012 to March 2013**

Tokushima Plant

No. of Employees 1,247

Production items

- Ball bearings
- Water pump bearings
- Cylindrical roller bearings
- Special environment bearings
- Double row angular contact ball bearings

Overall environmental data

		Classification		Volume
INPUT		Energy consumption	(GJ)	956,791
		Water consumed	(m^3)	1,183,868
		Chemical substances handled	(kg)	18,944
OUTPUT	Atmosphere	Greenhouse gases	($t\text{-}CO_2$)	37,699
		NOx	(kg)	45,412
		SOx	(kg)	1,627
		Chemical substances released	(kg)	3,922
	Waterways	Wastewater	(m^3)	202,039
		COD	(kg)	5,620
		Nitrogen	(kg)	4,315
		Phosphorus	(kg)	14
		Chemical substances transferred	(kg)	0
	Materials discarded	Recycled for profit	(t)	7,000
		Recycled at a charge	(t)	1,555
		Waste (incineration+landfill)	(t)	0
		Chemical substances transferred	(kg)	0

Water quality measurement data

Index	Regulation value	Results	
		Maximum	Average
pH	5.9～8.2	7.6	6.6
COD	16	11	8.4
SS	24	16	3.8
Oil content	2.4	1.8	1.4
Nitrogen	25	7.7	4.5
Phosphorus	2.5	0.06	0.05

Unit : mg/ℓ (Excluding Ph)

Atmosphere measurement data

Facility	Index	Regulation value	Maximum value
Boiler (Absorption type cold and hot water generator)	Dust	0.24	0.01
	NOx	144	65
	SOx	16.8	0.02
Diesel engine	Dust	0.08	0.03
	NOx	902.5	830
	SOx	16.8	0.12

Unit : Dust= g/Nm^3 NOx= ppm SOx= Value K

Noise / Vibration data

Unit : dB

Index		Regulation value	Maximum	Average
Noise	Morning	59	52	46
	Afternoon	64	59	56
	Evening	59	52	50
	Night	54	51	47
Vibration	Daytime	63	56	51
	Nighttime	58	55	51

Foul odor

* Malodorous substances (22 substances) were measured.
* All items were below minimum determination limit.

Substances subject to PRTR

Unit : kg/year

Substance number	Chemical name	Amount handled	Amount released			Amount transferred		Amount recycled	Amount Removed and treated	Amount consumed
			Atmosphere	Waterways	Soil	Sewage	Waste			
80	Xylene	3,894	3,894	—	—	—	—	—	—	—
438	Methylnaphthalene	7,505	—	—	—	—	—	—	7,505	—

Okazaki Plant

No. of Employees 763

Production items

- 4WD coupling
- Linear solenoid valves for AT and CVT
- Oil pumps for AT and CVT
- Propeller shafts
- Cast parts

Overall environmental data

		Classification		Volume
INPUT		Energy consumption	(GJ)	562,475
		Water consumed	(m^3)	90,572
		Chemical substances handled	(kg)	5,234
OUTPUT	Atmosphere	Greenhouse gases	($t\text{-}CO_2$)	23,121
		NOx	(kg)	18,418
		SOx	(kg)	0
		Chemical substances released	(kg)	3,399
	Waterways	Wastewater	(m^3)	44,773
		COD	(kg)	121
		Nitrogen	(kg)	238
		Phosphorus	(kg)	0.7
		Chemical substances transferred	(kg)	0
	Materials discarded	Recycled for profit	(t)	6,446
		Recycled at a charge	(t)	2,272
		Waste (incineration+landfill)	(t)	0
		Chemical substances transferred	(kg)	0

Water quality measurement data

Index	Regulation value	Results	
		Maximum	Average
pH	5.9～8.4	8.1	7.7
COD	16	3.3	2.5
BOD	16	3.5	2.2
SS	16	3.0	1.3
Oil content	1.6	0.50	0.25
Zinc	0.8	0.05	0.05

Unit : mg/ℓ (Excluding Ph)

Index	Regulation value	Results	
		Maximum	Average
Soluble iron	2.4	0.50	0.50
Soluble manganese	2.4	0.25	0.25
Fluorine	0.8	0.10	0.10
Nitrogen	(12)	7.1	5.6
Phosphorus	(1.6)	0.10	0.05
Boron	8	0.02	0.02

Atmosphere measurement data

Facility	Index	Regulation value	Maximum value
Electric furnace	Dust	0.1	0.002
	NOx	80	10
	SOx	6.1	—
Boiler (for air conditioning)	Dust	0.1	0.002
	NOx	104	38
	SOx	—	—
Heating furnace	Dust	0.1	0.002
	NOx	80	10
	SOx	6.1	—
Gas engine (cogeneration)	Dust	0.04	0.005
	NOx	160	115
	SOx	6.1	—

Unit : Dust= g/Nm^3 NOx= ppm SOx=Nm^3/hr

Noise / Vibration data

Unit : dB

Index		Regulation value	Maximum	Average
Noise	Morning	64	59	52
	Afternoon	69	63	56
	Evening	64	59	52
	Night	59	53	51
Vibration	Daytime	68	34	30
	Nighttime	63	39	31

Foul odor

Measurement item	Regulation value	Measurement
Odor index	12	Less than 10

Substances subject to PRTR

Unit : kg/year

Substance number	Chemical name	Amount handled	Amount released			Amount transferred		Amount recycled	Amount Removed and treated	Amount consumed
			Atmosphere	Waterways	Soil	Sewage	Waste			
300	Toluene	3,139	2,511	—	—	—	—	—	—	628

JTEKT CSR Report 2013

Environmental Data by Operations Base ③

This page includes the environmental data for the Tokyo Plant and Kagawa Plant, out of our 13 locations,including 12 domestic plants and 1 operations center.

[Chemicals] Substances subject to PRTR **[Atmosphere]** Measured values are the maximum values **[Water quality]** pH: Hydrogen-ion concentration/ COD:Chemical oxygen demand/ BOD: Biochemical oxygen demand/ SS: Suspended solids in water/ Oil content: N-hexane extract content/ ND: Lower than determination limit/ Values in parenthesis show the daily average values **[Regulated value]** JTEKT internal standards (some more stricter than regulatory amounts) **[Substances subject to PRTR]** Shows substances which are handled in amounts of 1,000 kg/year or more. Substance number shows the legislative number for each of the No. 1 type chemical substances of the PRTR regulations. Removal processing amount is the amount of substances subject to PRTR which are incinerated, neutralized, broken down, put through reaction treatment, etc. within JTEKT premises. Consumed amount is the amount of substances subject to PRTR which are changed to another substance through reaction treatment, or removed from JTEKT premises in, or attached to, products. **[Target period] April 2012 to March 2013**

Tokyo Plant

No. of Employees 559

Production items

- Needle roller bearings
- Constant velocity joints
- Drive shafts
- Propeller shafts

Overall environmental data

		Classification		Volume
INPUT		Energy consumption	(GJ)	337,738
		Water consumed	(m^3)	130,047
		Chemical substances handled	(kg)	12,160
OUTPUT	Atmosphere	Greenhouse gases	($t\text{-}CO_2$)	13,048
		NOx	(kg)	1.6
		SOx	(kg)	4.5
		Chemical substances released	(kg)	8,715
	Sewage	Wastewater	(m^3)	87,923
		BOD	(kg)	1,239
		Nitrogen	(kg)	1,323
		Phosphorus	(kg)	31
		Chemical substances transferred	(kg)	77
	Materials discarded	Recycled for profit	(t)	1,805
		Recycled at a charge	(t)	788
		Waste (incineration+landfill)	(t)	0
		Chemical substances transferred	(kg)	1,662

* Due to sewage disposal, there are no regulation values for COD

Water quality measurement data

Index	Regulation value	Results	
		Maximum	Average
pH	5.8～8.0	7.9	7.4
BOD	150	88	16
SS	200	30	16
Oil content	20	3.0	1.2
Nitrogen	96	84	18
Phosphorus	12.8	0.83	0.32

Unit : mg/ℓ (Excluding Ph)

Atmosphere measurement data

Facility	Index	Regulation value	Maximum value
Gas suction type boiler	Dust	0.1	0.003
	NOx	44	39
	SOx	0.3	0.01

Unit : Dust= g/Nm^3 NOx= ppm SOx= Value K

Noise / Vibration data

Unit : dB

Index		Regulation value	Maximum	Average
Noise	Morning	59	59	57
	Afternoon	69	61	59
	Evening	59	58	57
	Night	54	54	52
Vibration	Daytime	58	41	31
	Nighttime	48	38	24

Foul odor

* Malodorous substances (22 substances) were measured.
* All items were below minimum determination limit.

Substances subject to PRTR

Unit : kg/year

Substance number	Chemical name	Amount handled	Amount released			Amount transferred		Amount recycled	Amount Removed and treated	Amount consumed
			Atmosphere	Waterways	Soil	Sewage	Waste			
1	Water-soluble zinc compounds	1,332	–	–	–	–	133	–	–	1,199
80	Xylene	1,610	1,610	–	–	–	–	–	–	–
300	Toluene	6,969	6,969	–	–	–	–	–	–	–

Kagawa Plant

No. of Employees 858

Production items

- Tapered roller bearings

Overall environmental data

		Classification		Volume
INPUT		Energy consumption	(GJ)	946,329
		Water consumed	(m^3)	364,695
		Chemical substances handled	(kg)	7,830
OUTPUT	Atmosphere	Greenhouse gases	($t\text{-}CO_2$)	36,943
		NOx	(kg)	1,545
		SOx	(kg)	299
		Chemical substances released	(kg)	3,169
	Waterways	Wastewater	(m^3)	257,270
		COD	(kg)	4,618
		Nitrogen	(kg)	2,311
		Phosphorus	(kg)	90
		Chemical substances transferred	(kg)	6
	Materials discarded	Recycled for profit	(t)	8,881
		Recycled at a charge	(t)	1,263
		Waste (incineration+landfill)	(t)	0
		Chemical substances transferred	(kg)	154

Water quality measurement data

Index	Regulation value	Results	
		Maximum	Average
pH	5.9～8.4	7.1	6.6
COD	40	33	28
BOD	40	38	36
SS	40	18	6.2

Unit : mg/ℓ (Excluding Ph)

Index	Regulation value	Results	
		Maximum	Average
Oil content	2.4	2.3	2.1
Nitrogen	48	17	12
Phosphorus	6.4	4.5	1.6

Atmosphere measurement data

Facility	Index	Regulation value	Maximum value
Boiler	Dust	0.24	0.02
	NOx	208	79
	SOx	4.0	1.0
Private power generator	Dust	0.08	0.03
	NOx	902.5	810
	SOx	4.0	0.5

Unit : Dust= g/Nm^3 NOx= ppm SOx= Value K
* Less than regulatory amounts (950)

Noise / Vibration data

Unit : dB

Index		Regulation value	Maximum	Average
Noise	Morning	64	59	56
	Afternoon	64	59	56
	Evening	64	59	56
	Night	59	58	53
Vibration	Daytime	49	34	30
	Nighttime	46	32	28

Foul odor

Unit : ppm

Measurement item	Regulation value	Measurement
Acetaldehyde	0.04	0.013

* Malodorous substances (22 substances) were measured.
* All items not listed were below minimum determination limit.

Substances subject to PRTR

Unit : kg/year

Substance number	Chemical name	Amount handled	Amount released			Amount transferred		Amount recycled	Amount Removed and treated	Amount consumed
			Atmosphere	Waterways	Soil	Sewage	Waste			
80	Xylene	3,051	3,051	–	–	–	–	–	–	–
438	Methylnaphthalene	2,240	11	–	–	–	–	–	2,229	–

Environmental Data by Operations Base ④

This page includes the environmental data for the Nara Plant and Higashi-kariya operations center, out of our 13 locations,including 12 domestic plants and 1 operations center.

[Chemicals] Substances subject to PRTR **[Atmosphere]** Measured values are the maximum values **[Water quality]** pH: Hydrogen-ion concentration/ COD:Chemical oxygen demand/ BOD: Biochemical oxygen demand/ SS: Suspended solids in water/ Oil content: N-hexane extract content/ ND: Lower than determination limit/ Values in parenthesis show the daily average values **[Regulated value]** JTEKT internal standards (some more stricter than regulatory amounts) **[Substances subject to PRTR]** Shows substances which are handled in amounts of 1,000 kg/year or more. Substance number shows the legislative number for each of the No. 1 type chemical substances of the PRTR regulations. Removal processing amount is the amount of substances subject to PRTR which are incinerated, neutralized, broken down, put through reaction treatment, etc. within JTEKT premises. Consumed amount is the amount of substances subject to PRTR which are changed to another substance through reaction treatment, or removed from JTEKT premises in, or attached to, products. **[Target period] April 2012 to March 2013**

Nara Plant

No. of Employees 1,787

Production items

- Electric power steering
- Hydraulic power steering
- Manual steering

Overall environmental data

		Classification		Volume
INPUT		Energy consumption	(GJ)	215,888
		Water consumed	(m³)	70,823
		Chemical substances handled	(kg)	15,009
OUTPUT	Atmosphere	Greenhouse gases	(t-CO_2)	8,260
		NOx	(kg)	131
		SOx	(kg)	233
		Chemical substances released	(kg)	12,038
	Waterways	Wastewater	(m³)	37,578
		COD	(kg)	289
		Nitrogen	(kg)	550
		Phosphorus	(kg)	103
		Chemical substances transferred	(kg)	0
	Materials discarded	Recycled for profit	(t)	1,154
		Recycled at a charge	(t)	539
		Waste (incineration+landfill)	(t)	0
		Chemical substances transferred	(kg)	94

Water quality measurement data

Index	Regulation value	Results	
		Maximum	Average
pH	5.9~8.4	7.4	7.2
COD	12	12	8.2
BOD	12	2.0	1.1
SS	20	0.60	0.60
Oil content	2.4	1.3	1.3

Unit : mg/ℓ (Excluding Ph)

Index	Regulation value	Results	
		Maximum	Average
Soluble iron	0.8	0.09	0.05
Soluble manganese	0.8	0.05	0.03
Nitrogen	40	46*	17
Phosphorus	15	4.1	3.0

* Less than regulatory amounts

Atmosphere measurement data

Facility	Index	Regulation value	Maximum value
No. 1 Plant, No. 1 (Boiler)	Dust	0.24	0.008
	NOx	144	59
	SOx	1.6	0.031
No. 1 Plant, No. 2 (Boiler)	Dust	0.24	0.011
	NOx	144	56
	SOx	1.6	0.034
South No. 2 Plant (Boiler)	Dust	0.24	ND
	NOx	144	36
	SOx	1.6	ND

Unit : Dust= g/Nm³ NOx= ppm SOx= Value K

Noise / Vibration data

Unit : dB

Index		Regulation value	Maximum	Average
Noise	Morning	64	59	53
	Afternoon	67	61	56
	Evening	64	60	54
	Night	54	54	51
Vibration	Daytime	60	44	39
	Nighttime	55	42	37

Foul odor

* Malodorous substances (22 substances) were measured.
* All items were below minimum determination limit.

Substances subject to PRTR

Unit : kg/year

Substance number	Chemical name	Amount handled	Amount released			Amount transferred		Amount recycled	Amount Removed and treated	Amount consumed
			Atmosphere	Waterways	Soil	Sewage	Waste			
80	Xylene	9,163	9,163	—	—	—	—	—	—	—
300	Toluene	2,860	2,860	—	—	—	—	—	—	—
438	Methylnaphthalene	1,192	—	—	—	—	—	—	1,192	—

Higashi-kariya operations center

No. of Employees 103

Overall environmental data

		Classification		Volume
INPUT		Energy consumption	(GJ)	23,335
		Water consumed	(m³)	4,321
		Chemical substances handled	(kg)	0
OUTPUT	Atmosphere	Greenhouse gases	(t-CO_2)	973
		NOx	(kg)	273
		SOx	(kg)	95
		Chemical substances released	(kg)	0
	Waterways	Wastewater	(m³)	3,838
		COD	(kg)	16
		Nitrogen	(kg)	25
		Phosphorus	(kg)	0.014
		Chemical substances transferred	(kg)	0
	Materials discarded	Recycled for profit	(t)	34
		Recycled at a charge	(t)	29
		Waste (incineration+landfill)	(t)	0
		Chemical substances transferred	(kg)	0

Water quality measurement data

Index	Regulation value	Results	
		Maximum	Average
pH	6.0~8.3	7.8	7.2
COD	(16)	6.4	3.9
BOD	(16)	3.2	1.4
SS	(16)	1.7	1.1
Oil content	4	1.1	0.22
Zinc	1.6	0.16	0.13

Unit : mg/ℓ (Excluding Ph)

Index	Regulation value	Results	
		Maximum	Average
Soluble iron	4	0.50	0.47
Soluble manganese	4	0.25	0.18
Fluorine	6.4	0.12	0.12
Nitrogen	48	32	12
Phosphorus	6.4	0.01	0.01
Boron	8	0.04	0.02

Atmosphere measurement data

Facility	Index	Regulation value	Maximum value
Boiler (Hot and cold water generator)	Dust	0.12	ND
	NOx	104	71
	SOx	0.456	ND

Unit : Dust= g/Nm³ NOx= ppm SOx=Nm³/hr

Noise / Vibration data

Unit : dB

Index		Regulation value	Maximum	Average
Noise	Morning	64	55	49
	Afternoon	69	52	49
	Evening	64	55	49
	Night	59	55	49
Vibration	Daytime	68	41	35
	Nighttime	63	42	32

Foul odor

Measurement item	Regulation value	Measurement
Odor index	12	Less than 10

Substances subject to PRTR

* No substances had handling amounts of over 1,000 kg /year

JTEKT CSR Report 2013

Environmental Data by Operations Base ⑤

This page includes the environmental data for the Toyohashi Plant and Tadomisaki Plant, out of our 13 locations,including 12 domestic plants and 1 operations center.

[Chemicals] Substances subject to PRTR **[Atmosphere]** Measured values are the maximum values **[Water quality]** pH: Hydrogen-ion concentration/ COD:Chemical oxygen demand/ BOD: Biochemical oxygen demand/ SS: Suspended solids in water/ Oil content: N-hexane extract content/ ND: Lower than determination limit/ Values in parenthesis show the daily average values **[Regulated value]** JTEKT internal standards (some more stricter than regulatory amounts) **[Substances subject to PRTR]** Shows substances which are handled in amounts of 1,000 kg/year or more. Substance number shows the legislative number for each of the No. 1 type chemical substances of the PRTR regulations. Removal processing amount is the amount of substances subject to PRTR which are incinerated, neutralized, broken down, put through reaction treatment, etc. within JTEKT premises. Consumed amount is the amount of substances subject to PRTR which are changed to another substance through reaction treatment, or removed from JTEKT premises in, or attached to, products. **[Target period] April 2012 to March 2013**

Toyohashi Plant

No. of Employees 862

Production items
- Hydraulic power steering
- Manual steering
- Safety handle column

Overall environmental data

		Classification		Volume
INPUT		Energy consumption	(GJ)	345,552
		Water consumed	(m³)	58,499
		Chemical substances handled	(kg)	2,717
OUTPUT	Atmosphere	Greenhouse gases	(t-CO_2)	13,353
		NOx	(kg)	1,246
		SOx	(kg)	60
		Chemical substances released	(kg)	622
	Waterways	Wastewater	(m³)	15,871
		COD	(kg)	110
		Nitrogen	(kg)	282
		Phosphorus	(kg)	16
		Chemical substances transferred	(kg)	0
	Materials discarded	Recycled for profit	(t)	2,988
		Recycled at a charge	(t)	504
		Waste (incineration+landfill)	(t)	0
		Chemical substances transferred	(kg)	554

Water quality measurement data

Unit : mg/ℓ (Excluding Ph)

Index	Regulation value	Results	
		Maximum	Average
pH	6.1～8.0	7.3	6.9
COD	16	10	6.2
BOD	16	4.9	1.8
SS	24	13	3.9

Index	Regulation value	Results	
		Maximum	Average
Oil content	4	1.0	1.0
Nitrogen	48	48	16
Phosphorus	6.4	2.9	0.94

Atmosphere measurement data

Facility	Index	Regulation value	Maximum value
No. 1 Plant (Boiler)	Dust	0.03	0.002
	NOx	120	34
	SOx	1.0	0.004
No. 2 Plant (Hot and cold water generator)	Dust	0.03	0.001
	NOx	120	35
	SOx	1.0	0.002
No. 3 Plant (Hot and cold water generator)	Dust	0.10	0.056
	NOx	140	64
	SOx	1.0	0.002

Unit : Dust= g/Nm³ NOx= ppm SOx= Value K

Noise / Vibration data

Unit : dB

Index		Regulation value	Maximum	Average
Noise	Morning	60	58	55
	Afternoon	65	64	59
	Evening	64	61	56
	Night	59	56	53
Vibration	Daytime	55	41	38
	Nighttime	50	34	34

Foul odor

Measurement item	Regulation value	Measurement
Odor index	14	10

Substances subject to PRTR

Unit : kg/year

Substance number	Chemical name	Amount handled	Amount released			Amount transferred		Amount recycled	Amount Removed and treated	Amount consumed
			Atmosphere	Waterways	Soil	Sewage	Waste			
453	Molybdenum and its compounds	1,318	—	—	—	—	—	—	—	1,318

Tadomisaki Plant

No. of Employees 1,182

Production items
- Drive shafts
- 4WD coupling

Overall environmental data

		Classification		Volume
INPUT		Energy consumption	(GJ)	656,984
		Water consumed	(m³)	131,315
		Chemical substances handled	(kg)	877
OUTPUT	Atmosphere	Greenhouse gases	(t-CO_2)	24,943
		NOx	(kg)	1,348
		SOx	(kg)	17
		Chemical substances released	(kg)	74
	Waterways	Wastewater	(m³)	57,972
		COD	(kg)	494
		Nitrogen	(kg)	652
		Phosphorus	(kg)	5.0
		Chemical substances transferred	(kg)	0
	Materials discarded	Recycled for profit	(t)	9,295
		Recycled at a charge	(t)	626
		Waste (incineration+landfill)	(t)	0
		Chemical substances transferred	(kg)	31

Water quality measurement data

Unit : mg/ℓ (Excluding Ph)

Index	Regulation value	Results	
		Maximum	Average
pH	6.1～8.3	7.6	7.3
COD	12	8.3	6.6
BOD	12	2.7	1.7
SS	24	3.0	1.3
Oil content	1.6	0.50	0.50
Zinc	4	0.08	0.08

Index	Regulation value	Results	
		Maximum	Average
Soluble iron	2.4	0.10	0.10
Soluble manganese	1.6	0.10	0.10
Fluorine	6.4	0.10	0.10
Nitrogen	(34.8)	14	8.5
Phosphorus	(3.6)	0.34	0.23
Boron	8	0.10	0.10

Atmosphere measurement data

Facility	Index	Regulation value	Maximum value
Boiler (Hot and cold water generator)	Dust	0.1	0.001
	NOx	104	38
	SOx	0.6	0.001
Continuous carburizing furnace	Dust	0.1	0.001
	NOx	104	10
	SOx	0.6	0.001

Unit : Dust= g/Nm³ NOx= ppm SOx=Nm³/hr

Noise / Vibration data

Unit : dB

Index		Regulation value	Maximum	Average
Noise	Morning	64	61	57
	Afternoon	69	61	57
	Evening	64	60	57
	Night	59	59	56
Vibration	Daytime	55	44	41
	Nighttime	50	44	41

Foul odor

Measurement item	Regulation value	Measurement
Odor index	16	10

Substances subject to PRTR

* No substances had handling amounts of over 1,000 kg /year

JTEKT CSR Report 2013

Environmental Data by Operations Base ⑥

This page includes the environmental data for the Hanazono Plant and Kameyama Plant, out of our 13 locations,including 12 domestic plants and 1 operations center.

[Chemicals] Substances subject to PRTR **[Atmosphere]** Measured values are the maximum values **[Water quality]** pH: Hydrogen-ion concentration/ COD:Chemical oxygen demand/ BOD: Biochemical oxygen demand/ SS: Suspended solids in water/ Oil content: N-hexane extract content/ ND: Lower than determination limit/ Values in parenthesis show the daily average values **[Regulated value]** JTEKT internal standards (some more stricter than regulatory amounts) **[Substances subject to PRTR]** Shows substances which are handled in amounts of 1,000 kg/year or more. Substance number shows the legislative number for each of the No. 1 type chemical substances of the PRTR regulations. Removal processing amount is the amount of substances subject to PRTR which are incinerated, neutralized, broken down, put through reaction treatment, etc. within JTEKT premises. Consumed amount is the amount of substances subject to PRTR which are changed to another substance through reaction treatment, or removed from JTEKT premises in, or attached to, products. **[Target period] April 2012 to March 2013**

Hanazono Plant

No. of Employees 1,370

Production items

- Electric power steering
- Hydraulic power steering pump
- Control computer

Overall environmental data

		Classification		Volume
INPUT		Energy consumption	(GJ)	284,574
		Water consumed	(m^3)	92,941
		Chemical substances handled	(kg)	912
OUTPUT	Atmosphere	Greenhouse gases	($t\text{-}CO_2$)	11,203
		NOx	(kg)	442
		SOx	(kg)	118
		Chemical substances released	(kg)	239
	Waterways	Wastewater	(m^3)	78,662
		COD	(kg)	246
		Nitrogen	(kg)	876
		Phosphorus	(kg)	4.2
		Chemical substances transferred	(kg)	0
	Materials discarded	Recycled for profit	(t)	838
		Recycled at a charge	(t)	365
		Waste (incineration+landfill)	(t)	0
		Chemical substances transferred	(kg)	132

Water quality measurement data

Unit : mg/ℓ (Excluding Ph)

Index	Regulation value	Results	
		Maximum	Average
pH	5.9～8.3	7.7	7.3
COD	8	3.8	2.7
BOD	8	4.0	1.5
SS	8	1.5	1.1
Oil content	1.6	1.0	1.0
Zinc	0.8	0.08	0.05

Index	Regulation value	Results	
		Maximum	Average
Soluble iron	2.4	0.50	0.47
Soluble manganese	2.4	0.25	0.24
Fluorine	0.8	0.10	0.10
Nitrogen	(24)	17	12
Phosphorus	(2.4)	0.12	0.05
Boron	8	1.0	1.0

Atmosphere measurement data

Facility	Index	Regulation value	Maximum value
Compact once-through boiler	Dust	0.08	0.002
	NOx	100	23
	SOx	6.07	0.01
Boiler (Hot and cold water generator)	Dust	0.08	0.002
	NOx	100	43
	SOx	6.07	0.01

Unit : Dust= g/Nm^3 NOx= ppm SOx=Nm^3/hr

Noise / Vibration data

Unit : dB

Index		Regulation value	Maximum	Average
Noise	Morning	60	51	45
	Afternoon	60	53	48
	Evening	60	46	44
	Night	56	45	45
Vibration	Daytime	60	53	40
	Nighttime	56	35	33

Foul odor

Measurement item	Regulation value	Measurement
Odor index	14	10

Substances subject to PRTR

* No substances had handling amounts of over 1,000 kg /year

Kameyama Plant

No. of Employees 302

Production items

- Ball bearings
- Clutch bearings

Overall environmental data

		Classification		Volume
INPUT		Energy consumption	(GJ)	156,755
		Water consumed	(m^3)	25,695
		Chemical substances handled	(kg)	5,210
OUTPUT	Atmosphere	Greenhouse gases	($t\text{-}CO_2$)	6,099
		NOx	(kg)	417
		SOx	(kg)	185
		Chemical substances released	(kg)	748
	Waterways	Wastewater	(m^3)	16,364
		COD	(kg)	49
		Nitrogen	(kg)	280
		Phosphorus	(kg)	2.8
		Chemical substances transferred	(kg)	0
	Materials discarded	Recycled for profit	(t)	711
		Recycled at a charge	(t)	259
		Waste (incineration+landfill)	(t)	0
		Chemical substances transferred	(kg)	746

Water quality measurement data

Unit : mg/ℓ (Excluding Ph)

Index	Regulation value	Results	
		Maximum	Average
pH	5.9～8.0	7.7	7.3
COD	8	6.0	2.6
BOD	8	2.0	1.3
SS	20	5.0	1.6
Oil content	1	0.50	0.50
Zinc	4	0.02	0.01

Index	Regulation value	Results	
		Maximum	Average
Soluble iron	8	0.03	0.02
Soluble manganese	1.6	0.02	0.02
Fluorine	6.4	0.10	0.10
Nitrogen	50	28	18
Phosphorus	1	0.69	0.17
Boron	8	0.06	0.06

Atmosphere measurement data

Facility	Index	Regulation value	Maximum value
No. 1 Plant (Boiler)	Dust	0.1	0.005
	NOx	144	52
	SOx	1.65	0.11

Unit : Dust= g/Nm^3 NOx= ppm SOx=Nm^3/hr

Noise / Vibration data

Unit : dB

Index		Regulation value	Maximum	Average
Noise	Morning	64	55	51
	Afternoon	69	58	54
	Evening	64	50	49
	Night	54	50	50
Vibration	Daytime	63	52	48
	Nighttime	58	50	44

Foul odor

* Malodorous substances (22 substances) were measured.
* All items were below minimum determination limit.

Substances subject to PRTR

Unit : kg/year

Substance number	Chemical name	Amount handled	Amount released			Amount transferred		Amount recycled	Amount Removed and treated	Amount consumed
			Atmosphere	Waterways	Soil	Sewage	Waste			
438	Methylnaphthalene	1,818	9	–	–	–	–	–	1,809	–

Environmental Data by Operations Base ⑦

This page includes the environmental data for the Sayama Plant, out of our 13 locations, including 12 domestic plants and 1 operations center.

[Chemicals] Substances subject to PRTR **[Atmosphere]** Measured values are the maximum values **[Water quality]** pH: Hydrogen-ion concentration/ COD:Chemical oxygen demand/ BOD: Biochemical oxygen demand/ SS: Suspended solids in water/ Oil content: N-hexane extract content/ ND: Lower than determination limit/ Values in parenthesis show the daily average values **[Regulated value]** JTEKT internal standards (some more stricter than regulatory amounts) **[Substances subject to PRTR]** Shows substances which are handled in amounts of 1,000 kg/year or more. Substance number shows the legislative number for each of the No. 1 type chemical substances of the PRTR regulations. Removal processing amount is the amount of substances subject to PRTR which are incinerated, neutralized, broken down, put through reaction treatment, etc. within JTEKT premises. Consumed amount is the amount of substances subject to PRTR which are changed to another substance through reaction treatment, or removed from JTEKT premises in, or attached to, products. **[Target period] April 2012 to March 2013**

Sayama Plant

No. of Employees 67

Production items

- TORSEN

On October 1st, 2013, JTEKT will merger with Toyoda-Koki Automotive Torsen Co. and establish the Sayama Plant

Overall environmental data

		Classification		Volume
INPUT		Energy consumption	(GJ)	33,583
		Water consumed	(m^3)	5,283
		Chemical substances handled	(kg)	2,156
OUTPUT	Atmosphere	Greenhouse gases	($t\text{-}CO_2$)	1,376
		NOx	(kg)	235
		SOx	(kg)	33
		Chemical substances released	(kg)	2,156
	Waterways	Wastewater	(m^3)	3,012
		COD	(kg)	—
		Nitrogen	(kg)	60
		Phosphorus	(kg)	0
		Chemical substances transferred	(kg)	0
	Materials discarded	Recycled for profit	(t)	674
		Recycled at a charge	(t)	105
		Waste (incineration+landfill)	(t)	5
		Chemical substances transferred	(kg)	0

Water quality measurement data

Index	Regulation value	Results	
		Maximum	Average
pH	5.0～9.0	7.2	7.2
Oil content	3.5	ND	ND
Nitrogen	192	20	20
Phosphorus	26	ND	ND

Unit : mg/ℓ (Excluding Ph)

Atmosphere measurement data

Facility	Index	Regulation value	Maximum value
Boiler (for air conditioning)	Dust	0.1	0.003
	NOx	120	71
	SOx	3.3	0.005

Unit : Dust= g/Nm^3 NOx= ppm SOx=Nm^3/hr

Noise / Vibration data

Unit : dB

Index		Regulation value	Maximum	Average
Noise	Morning	64	60	57
	Afternoon	69	62	57
	Evening	64	59	55
	Night	59	58	53
Vibration	Daytime	Unmeasured		
	Nighttime			

Foul odor

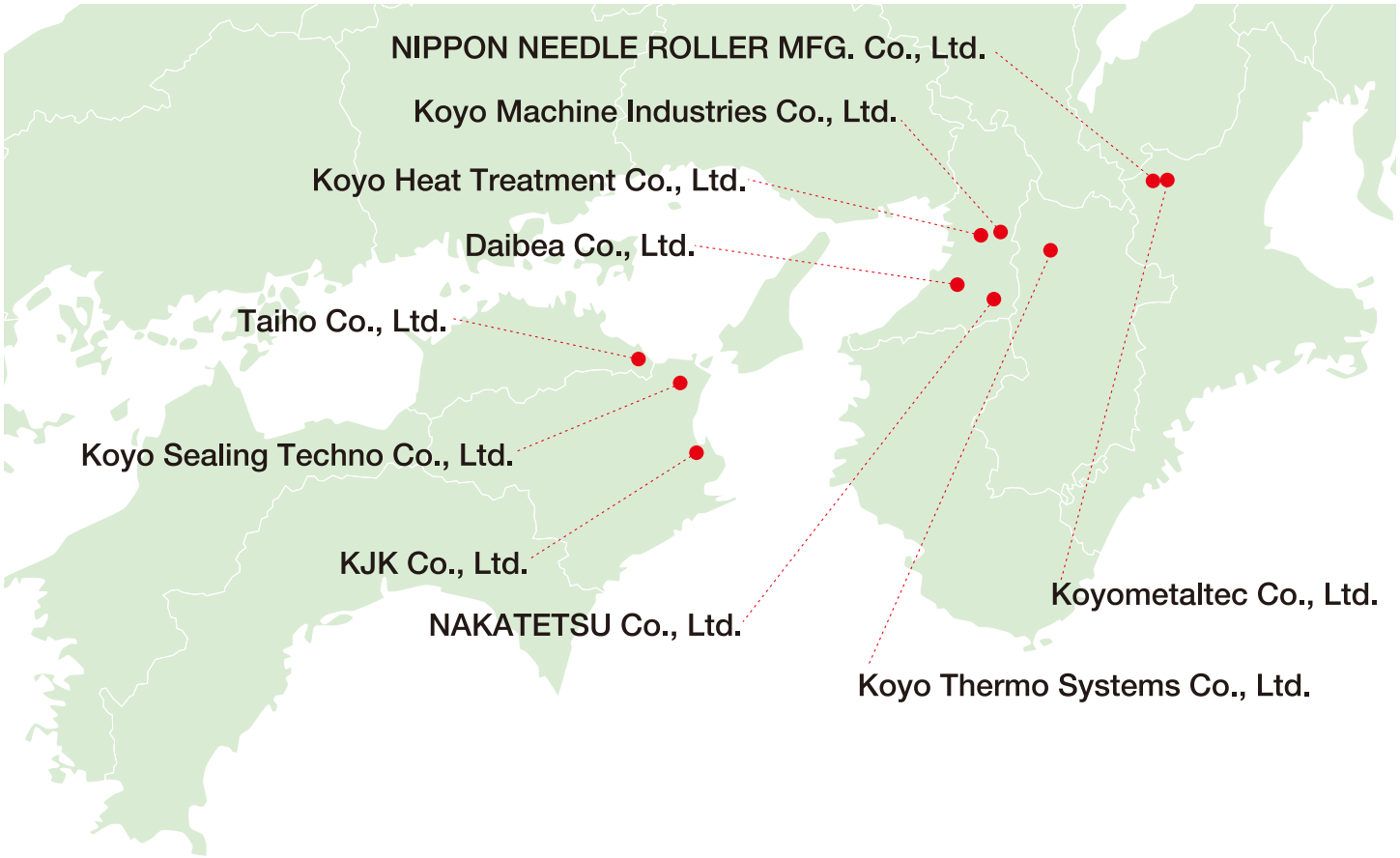
* Unmeasured

Substances subject to PRTR

Unit : kg/year

Substance number	Chemical name	Amount handled	Amount released			Amount transferred		Amount recycled	Amount Removed and treated	Amount consumed
			Atmosphere	Waterways	Soil	Sewage	Waste			
296	1,2,4-Trimethylbenzene	1,102	6	—	—	—	—	—	1,096	—

Global business sites [Domestic group production companies]



Koyo Machine Industries Co., Ltd.

Classification			Volume
INPUT		Energy Consumption (GJ)	214,941
		Water consumed (km³)	35.3
		Chemical substances handled (t)	8.4
OUTPUT	Atmosphere	Greenhouse gases (t-CO₂)	8,241
		Chemical substances released (t)	4.8
	Public water area	Chemical substances transferred (t)	0
	Materials Discarded	Recycled for profit (t)	2,464
		Waste output (t)	1,322
		Chemical substances transferred (t)	3.6

Koyo Sealing Techno Co., Ltd.

Classification			Volume
INPUT		Energy Consumption (GJ)	160,490
		Water consumed (km³)	137.8
		Chemical substances handled (t)	-
OUTPUT	Atmosphere	Greenhouse gases (t-CO₂)	6,933
		Chemical substances released (t)	-
	Public water area	Chemical substances transferred (t)	-
	Materials Discarded	Recycled for profit (t)	507
		Waste output (t)	18
		Chemical substances transferred (t)	-

Koyo Thermo Systems Co., Ltd.

Classification			Volume
INPUT		Energy Consumption (GJ)	67,528
		Water consumed (km³)	15.3
		Chemical substances handled (t)	-
OUTPUT	Atmosphere	Greenhouse gases (t-CO₂)	2,683
		Chemical substances released (t)	-
	Public water area	Chemical substances transferred (t)	-
	Materials Discarded	Recycled for profit (t)	115
		Waste output (t)	193
		Chemical substances transferred (t)	-

Daibea Co., Ltd.

Classification			Volume
INPUT		Energy Consumption (GJ)	317,577
		Water consumed (km³)	56.5
		Chemical substances handled (t)	-
OUTPUT	Atmosphere	Greenhouse gases (t-CO₂)	12,158
		Chemical substances released (t)	-
	Public water area	Chemical substances transferred (t)	-
	Materials Discarded	Recycled for profit (t)	612
		Waste output (t)	1,119
		Chemical substances transferred (t)	-

Koyometaltec Co., Ltd.

Classification			Volume
INPUT		Energy Consumption (GJ)	598,374
		Water consumed (km³)	117.9
		Chemical substances handled (t)	-
OUTPUT	Atmosphere	Greenhouse gases (t-CO₂)	23,398
		Chemical substances released (t)	-
	Public water area	Chemical substances transferred (t)	-
	Materials Discarded	Recycled for profit (t)	12,477
		Waste output (t)	693
		Chemical substances transferred (t)	-

KJK Co., Ltd.

Classification			Volume
INPUT		Energy Consumption (GJ)	47,354
		Water consumed (km³)	1.5
		Chemical substances handled (t)	-
OUTPUT	Atmosphere	Greenhouse gases (t-CO₂)	1,769
		Chemical substances released (t)	-
	Public water area	Chemical substances transferred (t)	-
	Materials Discarded	Recycled for profit (t)	3,032
		Waste output (t)	5
		Chemical substances transferred (t)	-

NIPPON NEEDLE ROLLER MFG. Co., Ltd.

Classification			Volume
INPUT		Energy Consumption (GJ)	74,432
		Water consumed (km³)	40.7
		Chemical substances handled (t)	-
OUTPUT	Atmosphere	Greenhouse gases (t-CO₂)	2,942
		Chemical substances released (t)	-
	Public water area	Chemical substances transferred (t)	-
	Materials Discarded	Recycled for profit (t)	128
		Waste output (t)	703
		Chemical substances transferred (t)	-

Koyo Heat Treatment Co., Ltd.

Classification			Volume
INPUT		Energy Consumption (GJ)	359,561
		Water consumed (km³)	34.4
		Chemical substances handled (t)	-
OUTPUT	Atmosphere	Greenhouse gases (t-CO₂)	15,418
		Chemical substances released (t)	-
	Public water area	Chemical substances transferred (t)	-
	Materials Discarded	Recycled for profit (t)	289
		Waste output (t)	49
		Chemical substances transferred (t)	-

Taiho Co., Ltd.

Classification			Volume
INPUT		Energy Consumption (GJ)	99,936
		Water consumed (km³)	5.8
		Chemical substances handled (t)	-
OUTPUT	Atmosphere	Greenhouse gases (t-CO₂)	3,779
		Chemical substances released (t)	-
	Public water area	Chemical substances transferred (t)	-
	Materials Discarded	Recycled for profit (t)	5,284
		Waste output (t)	0
		Chemical substances transferred (t)	-

NAKATETSU Co., Ltd.

Classification			Volume
INPUT		Energy Consumption (GJ)	311,823
		Water consumed (km³)	9.0
		Chemical substances handled (t)	-
OUTPUT	Atmosphere	Greenhouse gases (t-CO₂)	12,344
		Chemical substances released (t)	-
	Public water area	Chemical substances transferred (t)	-
	Materials Discarded	Recycled for profit (t)	11,268
		Waste output (t)	430
		Chemical substances transferred (t)	-

Toyooki Kogyo Co., Ltd.

Classification				Volume
INPUT		Energy Consumption	(GJ)	86,247
		Water consumed	(km^3)	25.0
		Chemical substances handled	(t)	6.3
OUTPUT	Atmosphere	Greenhouse gases	(t-CO_2)	3,238
		Chemical substances released	(t)	6.3
	Public water area	Chemical substances transferred	(t)	0
	Materials Discarded	Recycled for profit	(t)	505
		Waste output	(t)	244
		Chemical substances transferred	(t)	0

CNK Co., Ltd.

Classification				Volume
INPUT		Energy Consumption	(GJ)	271,529
		Water consumed	(km^3)	82.9
		Chemical substances handled	(t)	16.5
OUTPUT	Atmosphere	Greenhouse gases	(t-CO_2)	10,743
		Chemical substances released	(t)	10.1
	Public water area	Chemical substances transferred	(t)	0
	Materials Discarded	Recycled for profit	(t)	101
		Waste output	(t)	693
		Chemical substances transferred	(t)	6.4

Koyo Electronics Industries Co., Ltd.

Classification				Volume
INPUT		Energy Consumption	(GJ)	32,260
		Water consumed	(km^3)	8.4
		Chemical substances handled	(t)	-
OUTPUT	Atmosphere	Greenhouse gases	(t-CO_2)	1,228
		Chemical substances released	(t)	-
	Public water area	Chemical substances transferred	(t)	-
	Materials Discarded	Recycled for profit	(t)	42
		Waste output	(t)	17
		Chemical substances transferred	(t)	-

Utsunomiya Kiki Co., Ltd.

Classification				Volume
INPUT		Energy Consumption	(GJ)	136,453
		Water consumed	(km^3)	64.1
		Chemical substances handled	(t)	-
OUTPUT	Atmosphere	Greenhouse gases	(t-CO_2)	5,154
		Chemical substances released	(t)	-
	Public water area	Chemical substances transferred	(t)	-
	Materials Discarded	Recycled for profit	(t)	2,458
		Waste output	(t)	198
		Chemical substances transferred	(t)	-

HOUKO Co., Ltd.

Classification				Volume
INPUT		Energy Consumption	(GJ)	31,482
		Water consumed	(km^3)	4.4
		Chemical substances handled	(t)	7.9
OUTPUT	Atmosphere	Greenhouse gases	(t-CO_2)	1,255
		Chemical substances released	(t)	7.9
	Public water area	Chemical substances transferred	(t)	0
	Materials Discarded	Recycled for profit	(t)	221
		Waste output	(t)	37
		Chemical substances transferred	(t)	0

Toyoda Van Moppes Ltd.

Classification				Volume
INPUT		Energy Consumption	(GJ)	25,084
		Water consumed	(km^3)	11.0
		Chemical substances handled	(t)	2.6
OUTPUT	Atmosphere	Greenhouse gases	(t-CO_2)	935
		Chemical substances released	(t)	2.3
	Public water area	Chemical substances transferred	(t)	0
	Materials Discarded	Recycled for profit	(t)	132
		Waste output	(t)	90
		Chemical substances transferred	(t)	0

FORMICS Co., Ltd.

Classification				Volume
INPUT		Energy Consumption	(GJ)	13,279
		Water consumed	(km^3)	1.7
		Chemical substances handled	(t)	4.9
OUTPUT	Atmosphere	Greenhouse gases	(t-CO_2)	519
		Chemical substances released	(t)	4.9
	Public water area	Chemical substances transferred	(t)	0
	Materials Discarded	Recycled for profit	(t)	541
		Waste output	(t)	29
		Chemical substances transferred	(t)	0

Domestic group Total

Classification				Volume
INPUT		Energy Consumption	(GJ)	2,848,349
		Water consumed	(km^3)	652
		Per base unit	(km^3/100 million yen)	0.69
		Chemical substances handled	(t)	46.7
OUTPUT	Atmosphere	Greenhouse gases	(t-CO_2)	112,737
		Per base unit	(t-CO_2/100 million yen)	118.8
		Chemical substances released	(t)	36.4
	Public water area	Chemical substances transferred	(t)	0
	Materials Discarded	Recycled for profit	(t)	40,175
		Waste output	(t)	5,838
		Basic emissions unit	(t/100 million yen)	48.5
		Chemical substances transferred	(t)	10.0

* Emissions = Amount of recyclables sold + amount of waste disposed
* Includes chemical substances subject to PRTR which have a handling amount of 1000 kg/year or more.

Global business sites [North America/South America]

JATV
(JTEKT AUTOMOTIVE TENNESSEE-VONORE LLC)

Classification			Volume
INPUT		Energy Consumption (GJ)	339,981
		Water consumed (m³)	49,268
OUTPUT	Atmosphere	Greenhouse gases (t-CO_2)	20,370
	Materials Discarded	Recycled for profit (t)	3,515
		Waste output (t)	1,744

JATM
(JTEKT AUTOMOTIVE TENNESSEE-MORRISTOWN, INC.)

Classification			Volume
INPUT		Energy Consumption (GJ)	568,910
		Water consumed (m³)	39,242
OUTPUT	Atmosphere	Greenhouse gases (t-CO_2)	32,017
	Materials Discarded	Recycled for profit (t)	153
		Waste output (t)	144

JATX
(JTEKT AUTOMOTIVE TEXAS, L.P.)

Classification			Volume
INPUT		Energy Consumption (GJ)	99,797
		Water consumed (m³)	9,622
OUTPUT	Atmosphere	Greenhouse gases (t-CO_2)	6,029
	Materials Discarded	Recycled for profit (t)	883
		Waste output (t)	468

KBNA
(KOYO BEARINGS NORTH AMERICA LLC)

Classification			Volume
INPUT		Energy Consumption (GJ)	769,618
		Water consumed (m³)	3,521,803
OUTPUT	Atmosphere	Greenhouse gases (t-CO_2)	47,098
	Materials Discarded	Recycled for profit (t)	4,491
		Waste output (t)	1,949

* In April 2013, KCU and KBUS integrated, changing the company name to KBNA. The data is that of former KCU.

JASC
(JTEKT AUTOMOTIVE SOUTH CAROLINA,INC.)

Classification			Volume
INPUT		Energy Consumption (GJ)	104,972
		Water consumed (m³)	5,230
OUTPUT	Atmosphere	Greenhouse gases (t-CO_2)	6,341
	Materials Discarded	Recycled for profit (t)	1,816
		Waste output (t)	94

JABR
(JTEKT AUTOMOTIVA BRASIL LTDA.)

Classification			Volume
INPUT		Energy Consumption (GJ)	125,364
		Water consumed (m³)	18,254
OUTPUT	Atmosphere	Greenhouse gases (t-CO_2)	1,338
	Materials Discarded	Recycled for profit (t)	928
		Waste output (t)	439

TKB
(TOYODA-KOKI DO BRASIL INDUSTRIA E COMERCIO DE MAQUINAS, LTDA.)

Classification			Volume
INPUT		Energy Consumption (GJ)	2,140
		Water consumed (m³)	1,327
OUTPUT	Atmosphere	Greenhouse gases (t-CO_2)	51
	Materials Discarded	Recycled for profit (t)	1
		Waste output (t)	27

JAAR
(JTEKT AUTOMOTIVE ARGENTINA S.A.)

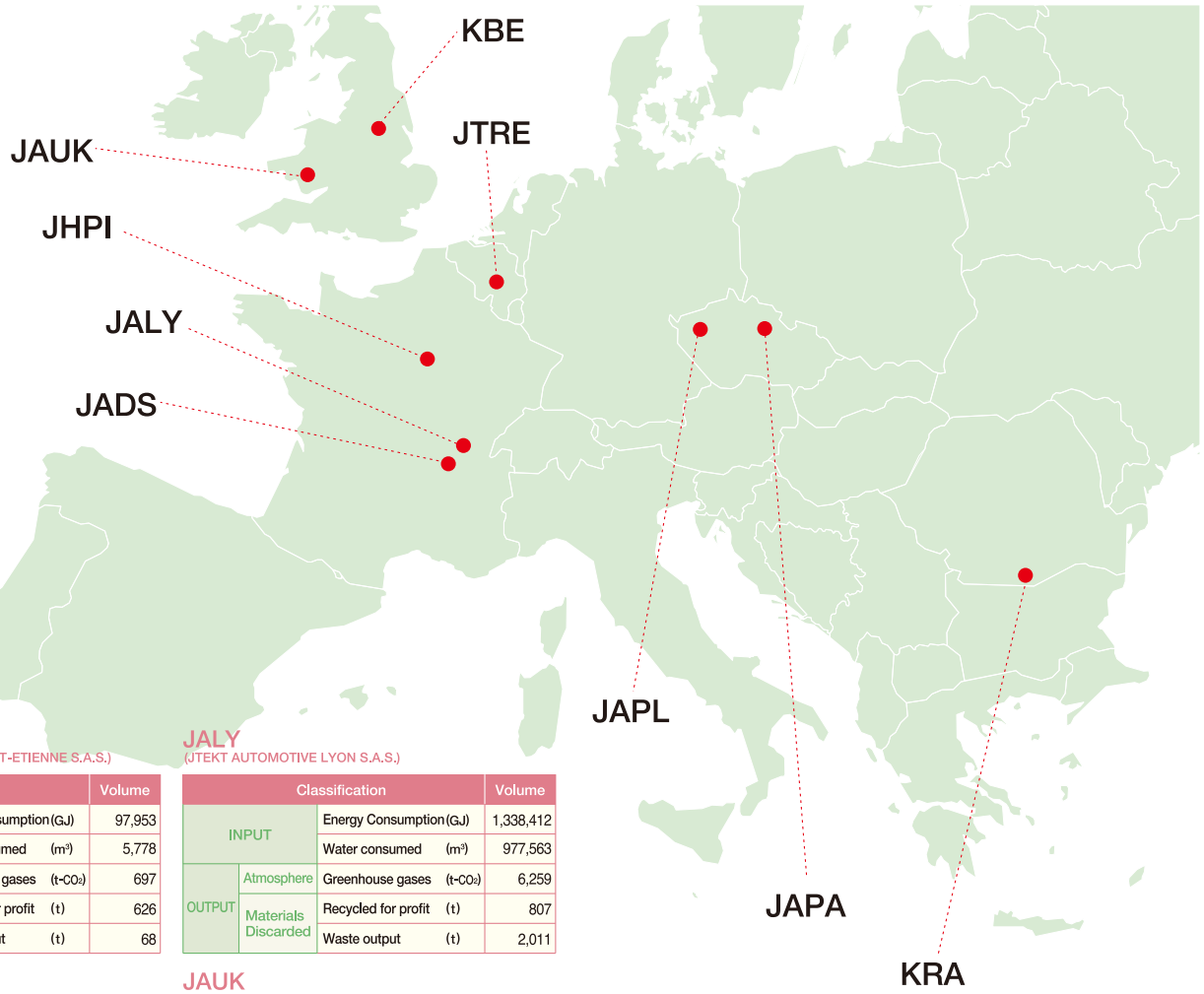
Classification			Volume
INPUT		Energy Consumption (GJ)	6,997
		Water consumed (m³)	1,666
OUTPUT	Atmosphere	Greenhouse gases (t-CO_2)	209
	Materials Discarded	Recycled for profit (t)	0
		Waste output (t)	29

North America / South America group Total

Classification			Volume
INPUT		Energy Consumption (GJ)	2,017,779
		Water consumed (km³)	3,646
		Per base unit (km³/100 million yen)	2.6
OUTPUT	Atmosphere	Greenhouse gases (t-CO_2)	113,453
		Per base unit (t-CO_2/100 million yen)	81.7
	Materials Discarded	Recycled for profit (t)	11,787
		Waste output (t)	4,894
		Basic emissions unit (t/100 million yen)	12.0

* Emissions = Amount of recyclables sold + amount of waste disposed

Global business sites [Europe]



JADS
(JTEKT AUTOMOTIVE DIJON SAINT-ETIENNE S.A.S.)

Classification			Volume
INPUT		Energy Consumption (GJ)	97,953
		Water consumed (m³)	5,778
OUTPUT	Atmosphere	Greenhouse gases (t-CO₂)	697
	Materials Discarded	Recycled for profit (t)	626
		Waste output (t)	68

JALY
(JTEKT AUTOMOTIVE LYON S.A.S.)

Classification			Volume
INPUT		Energy Consumption (GJ)	1,338,412
		Water consumed (m³)	977,563
OUTPUT	Atmosphere	Greenhouse gases (t-CO₂)	6,259
	Materials Discarded	Recycled for profit (t)	807
		Waste output (t)	2,011

JHPI
(JTEKT HPI S.A.S.)

Classification			Volume
INPUT		Energy Consumption (GJ)	117,813
		Water consumed (m³)	4,979
OUTPUT	Atmosphere	Greenhouse gases (t-CO₂)	717
	Materials Discarded	Recycled for profit (t)	176
		Waste output (t)	258

JAUK
(JTEKT AUTOMOTIVE UK LTD.)

Classification			Volume
INPUT		Energy Consumption (GJ)	31,475
		Water consumed (m³)	701
OUTPUT	Atmosphere	Greenhouse gases (t-CO₂)	1,095
	Materials Discarded	Recycled for profit (t)	325
		Waste output (t)	46

KBE
(KOYO BEARINGS (EUROPE) LTD.)

Classification			Volume
INPUT		Energy Consumption (GJ)	211,094
		Water consumed (m³)	948,067
OUTPUT	Atmosphere	Greenhouse gases (t-CO₂)	11,590
	Materials Discarded	Recycled for profit (t)	1,375
		Waste output (t)	789

JAPL
(JTEKT AUTOMOTIVE CZECH PLZEN,S.R.O.)

Classification			Volume
INPUT		Energy Consumption (GJ)	56,308
		Water consumed (m³)	9,311
OUTPUT	Atmosphere	Greenhouse gases (t-CO₂)	3,168
	Materials Discarded	Recycled for profit (t)	177
		Waste output (t)	282

JAPA
(JTEKT AUTOMOTIVE CZECH PARDUBICE, S.R.O.)

Classification			Volume
INPUT		Energy Consumption (GJ)	149,138
		Water consumed (m³)	8,205
OUTPUT	Atmosphere	Greenhouse gases (t-CO₂)	7,784
	Materials Discarded	Recycled for profit (t)	288
		Waste output (t)	455

JTRE
(JTEKT TORSEN EUROPE S.A.)

Classification			Volume
INPUT		Energy Consumption (GJ)	46,865
		Water consumed (m³)	2,449
OUTPUT	Atmosphere	Greenhouse gases (t-CO₂)	1,296
	Materials Discarded	Recycled for profit (t)	1,222
		Waste output (t)	346

KRA
(KOYO ROMANIA S.A.)

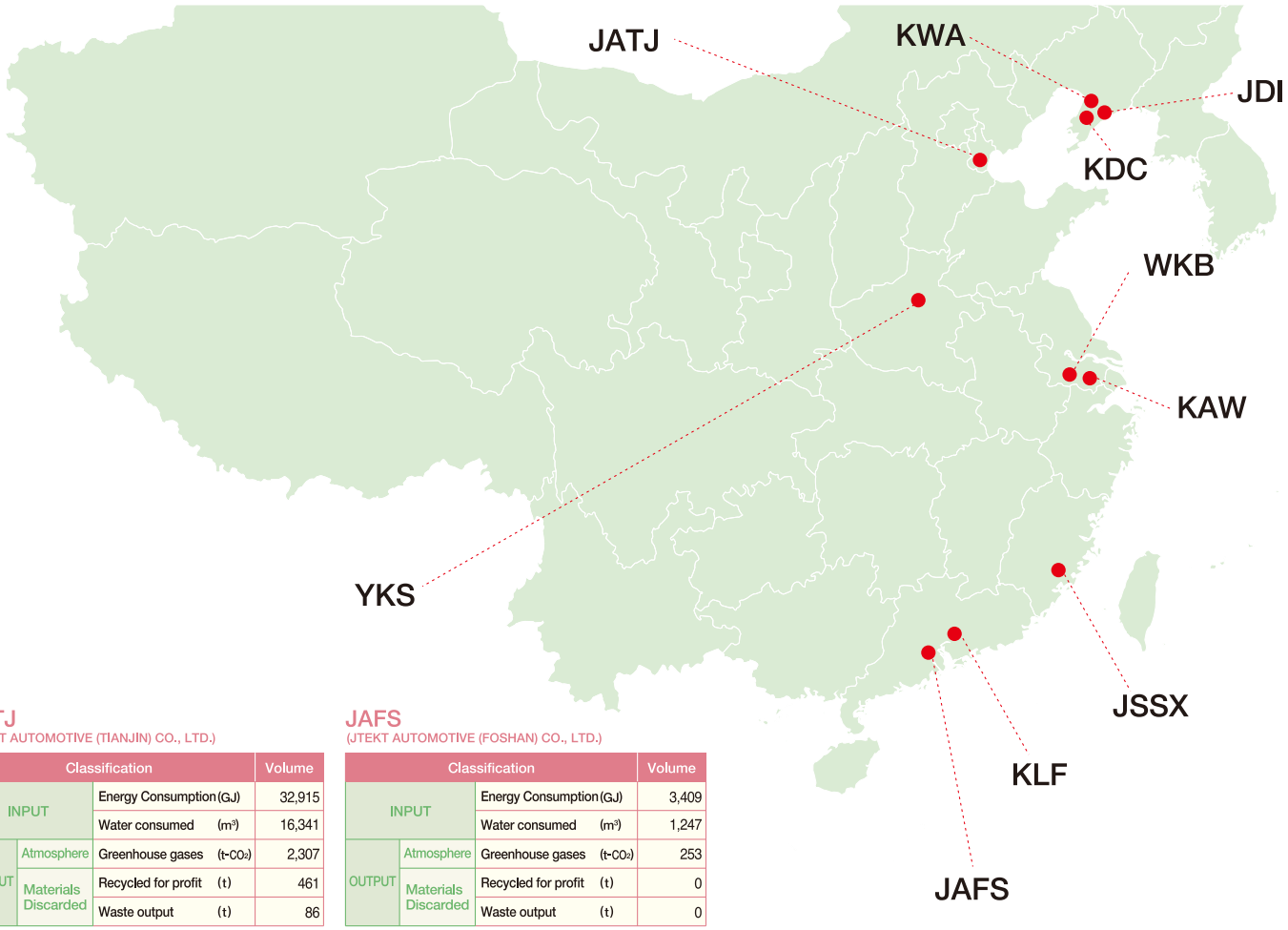
Classification			Volume
INPUT		Energy Consumption (GJ)	593,366
		Water consumed (m³)	166,838
OUTPUT	Atmosphere	Greenhouse gases (t-CO₂)	23,137
	Materials Discarded	Recycled for profit (t)	11,586
		Waste output (t)	427

Europe group Total

Classification			Volume
INPUT		Energy Consumption (GJ)	2,642,424
		Water consumed (km³)	2,124
		Per base unit (km³/100 million yen)	1.6
OUTPUT	Atmosphere	Greenhouse gases (t-CO₂)	55,742
		Per base unit (t-CO₂/100 million yen)	41.6
	Materials Discarded	Recycled for profit (t)	16,582
		Waste output (t)	4,682
		Basic emissions unit (t/100 million yen)	15.9

* Emissions = Amount of recyclables sold + amount of waste disposed

Global business sites [China]



JATJ
(JTEKT AUTOMOTIVE (TIANJIN) CO., LTD.)

Classification			Volume
INPUT		Energy Consumption (GJ)	32,915
		Water consumed (m^3)	16,341
OUTPUT	Atmosphere	Greenhouse gases (t-CO_2)	2,307
	Materials Discarded	Recycled for profit (t)	461
		Waste output (t)	86

JAFS
(JTEKT AUTOMOTIVE (FOSHAN) CO., LTD.)

Classification			Volume
INPUT		Energy Consumption (GJ)	3,409
		Water consumed (m^3)	1,247
OUTPUT	Atmosphere	Greenhouse gases (t-CO_2)	253
	Materials Discarded	Recycled for profit (t)	0
		Waste output (t)	0

JSSX
(JTEKT STEERING SYSTEMS (XIAMEN) CO., LTD.)

Classification			Volume
INPUT		Energy Consumption (GJ)	47,943
		Water consumed (m^3)	8,675
OUTPUT	Atmosphere	Greenhouse gases (t-CO_2)	3,558
	Materials Discarded	Recycled for profit (t)	179
		Waste output (t)	9

WKB
(WUXI KOYO BEARING CO., LTD.)

Classification			Volume
INPUT		Energy Consumption (GJ)	66,467
		Water consumed (m^3)	42,017
OUTPUT	Atmosphere	Greenhouse gases (t-CO_2)	4,866
	Materials Discarded	Recycled for profit (t)	0
		Waste output (t)	121

KWA
(DALIAN KOYO WAZHOU AUTOMOBILE BEARING CO., LTD.)

Classification			Volume
INPUT		Energy Consumption (GJ)	41,130
		Water consumed (m^3)	7,281
OUTPUT	Atmosphere	Greenhouse gases (t-CO_2)	2,925
	Materials Discarded	Recycled for profit (t)	727
		Waste output (t)	140

KDC
(KOYO BEARING DALIAN CO., LTD.)

Classification			Volume
INPUT		Energy Consumption (GJ)	83,567
		Water consumed (m^3)	21,119
OUTPUT	Atmosphere	Greenhouse gases (t-CO_2)	6,184
	Materials Discarded	Recycled for profit (t)	0
		Waste output (t)	172

KLF
(KOYO LIOHO (FOSHAN) AUTOMOTIVE PARTS CO., LTD.)

Classification			Volume
INPUT		Energy Consumption (GJ)	84,404
		Water consumed (m^3)	29,176
OUTPUT	Atmosphere	Greenhouse gases (t-CO_2)	6,246
	Materials Discarded	Recycled for profit (t)	1,721
		Waste output (t)	1,777

KAW
(KOYO AUTOMOTIVE PARTS (WUXI) CO., LTD.)

Classification			Volume
INPUT		Energy Consumption (GJ)	168,023
		Water consumed (m^3)	24,186
OUTPUT	Atmosphere	Greenhouse gases (t-CO_2)	12,222
	Materials Discarded	Recycled for profit (t)	122
		Waste output (t)	67

JDI
(JTEKT DALIAN INNOVATION AUTOMOTIVE CO., LTD.)

Classification			Volume
INPUT		Energy Consumption (GJ)	14,627
		Water consumed (m^3)	10,556
OUTPUT	Atmosphere	Greenhouse gases (t-CO_2)	1,086
	Materials Discarded	Recycled for profit (t)	675
		Waste output (t)	10

YKS
(YUBEI KOYO STEERING SYSTEMS CO., LTD.)

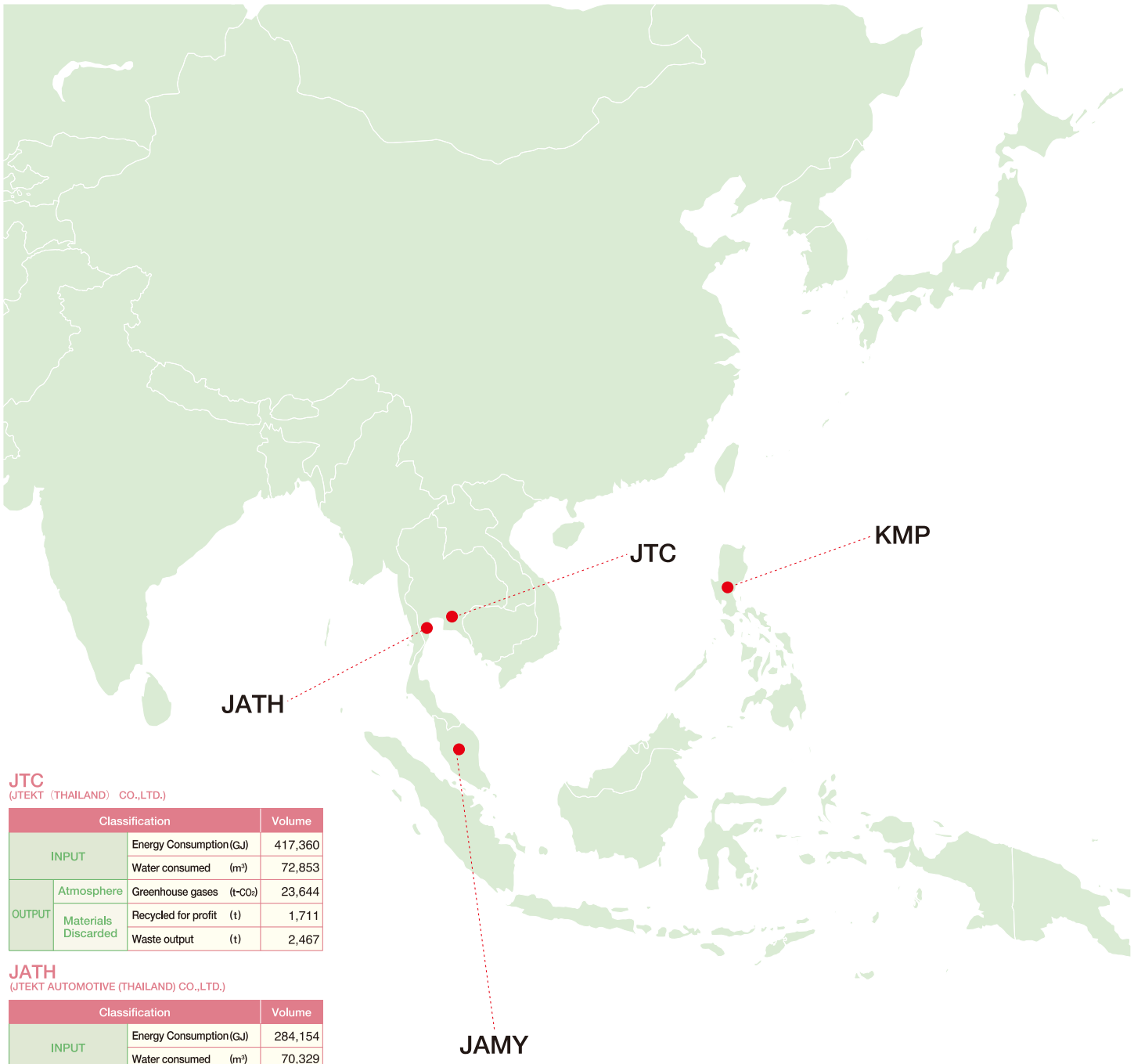
Classification			Volume
INPUT		Energy Consumption (GJ)	57,100
		Water consumed (m^3)	27,187
OUTPUT	Atmosphere	Greenhouse gases (t-CO_2)	4,224
	Materials Discarded	Recycled for profit (t)	406
		Waste output (t)	80

China group Total

Classification			Volume
INPUT		Energy Consumption (GJ)	599,585
		Water consumed (km^3)	188
		Per base unit (km^3/100 million yen)	0.39
OUTPUT	Atmosphere	Greenhouse gases (t-CO_2)	43,870
		Per base unit (t-CO_2/100 million yen)	91.9
	Materials Discarded	Recycled for profit (t)	4,291
		Waste output (t)	2,462
		Basic emissions unit (t/100 million yen)	14.2

* Emissions = Amount of recyclables sold + amount of waste disposed

Global business sites [ASEAN]



JTC
(JTEKT (THAILAND) CO.,LTD.)

Classification			Volume
INPUT		Energy Consumption (GJ)	417,360
		Water consumed (m³)	72,853
OUTPUT	Atmosphere	Greenhouse gases (t-CO_2)	23,644
	Materials Discarded	Recycled for profit (t)	1,711
		Waste output (t)	2,467

JATH
(JTEKT AUTOMOTIVE (THAILAND) CO.,LTD.)

Classification			Volume
INPUT		Energy Consumption (GJ)	284,154
		Water consumed (m³)	70,329
OUTPUT	Atmosphere	Greenhouse gases (t-CO_2)	16,030
	Materials Discarded	Recycled for profit (t)	5,292
		Waste output (t)	1,740

JAMY
(JTEKT AUTOMOTIVE (MALAYSIA) SDN. BHD.)

Classification			Volume
INPUT		Energy Consumption (GJ)	69,560
		Water consumed (m³)	13,096
OUTPUT	Atmosphere	Greenhouse gases (t-CO_2)	3,774
	Materials Discarded	Recycled for profit (t)	0
		Waste output (t)	2,468

KMP
(KOYO MANUFACTURING (PHILIPPINES) CORPORATION)

Classification			Volume
INPUT		Energy Consumption (GJ)	91,959
		Water consumed (m³)	24,588
OUTPUT	Atmosphere	Greenhouse gases (t-CO_2)	4,924
	Materials Discarded	Recycled for profit (t)	61
		Waste output (t)	172

ASEAN group Total

Classification			Volume
INPUT		Energy Consumption (GJ)	863,033
		Water consumed (km³)	181
		Per base unit (km³/100 million yen)	0.20
OUTPUT	Atmosphere	Greenhouse gases (t-CO_2)	48,373
		Per base unit (t-CO_2/100 million yen)	53.7
	Materials Discarded	Recycled for profit (t)	7,064
		Waste output (t)	6,847
		Basic emissions unit (t/100 million yen)	15.4

* Emissions = Amount of recyclables sold + amount of waste disposed